

REMARKS

Claims 1-26, 29-33, 35-37, 39, and 41-46 are pending upon entry of this Amendment E and Response to Final Office Action After RCE. Claims 1-19 were previously withdrawn as directed to a non-elected species. Applicants reserve the right to file one or more divisional applications directed to the non-elected invention.

Applicants have added new claim 46. Support for new claim 46 can be found in independent claim 36. No new subject matter has been added by this Amendment E and Response to Final Office Action After RCE.

Rejection under 35 U.S.C. §103

Reconsideration is requested of the rejection of claims 20-26, 29-33, 35-39, and 41-46 under 35 U.S.C. §103(a) as being unpatentable over Scott, Jr. et al. (U.S. Patent Publication No. 2002/0032421) in view of Whitfield et al. (U.S. Patent No. 4,432,834), Agyapong et al. (U.S. Patent No. 6,554,814), and Shah (U.S. Patent No. 4,575,376).

Claim 20 is directed to a fibrous nonwoven comprising at least one short fiber-including layer, wherein at least a fraction of the short fibers is provided with a finish in an amount of more than 0.035 percent by weight, based on the fiber weight of the short fibers provided with the finish. The finish is selected from the group consisting of imidazolium ethosulfates, methosulfates, and the ethoxylated and propoxylated derivatives of imidazolium ethosulfates and methosulfates, wherein the short fibers have a moisture content in the range of from 4 to 16%.

Claim 36 is directed to a short fiber provided with a finish in an amount of more than 0.035 percent by weight, based

on the fiber weight, wherein the finish is selected from the group consisting of imidazolium ethosulfates, methosulfates, and the ethoxylated and propoxylated derivatives of imidazolium ethosulfates and methosulfates, and wherein the short fiber has a multi-limbed cross-section and a moisture content in the range of from 4 to 16%.

Scott, Jr. et al. is directed to an absorbent airlaid nonwoven fabric comprising short fibers, composed of cotton or rayon, that may be bonded together using a binder of thermoplastic fibers. (See Scott, Jr. et al. at page 2, paragraph [0014] and page 3, paragraph [0025]). The short fibers have a length of 0.5-12 mm. (See Scott, Jr. et al. at page 3, paragraph [0025]). In one embodiment, the airlaid fabric may further include superabsorbent materials. (See Scott, Jr. et al. at page 3, paragraph [0029]).

Whitfield et al. is directed to a composition for addition to cellulosic fibers prior to felting them into a sheet comprising as component (a) a monomeric water soluble diallyl dimethyl ammonium halide or homopolymer thereof or mixtures thereof and as component (b) a water dispersible complex fatty amido compound, specifically, 1-stearamidoethyl-1-methyl-2-heptadecyl imidazolinium methosulfate.¹ Whitfield et al. also discloses a dried cellulosic fiber tissue sheet containing an amount of the composition to enhance the softness of the dried sheet while increasing, or not substantially reducing, absorbency of water and tensile strength of the dried sheet as compared with a dried felted cellulosic tissue fiber sheet to which said composition has not been added.²

¹ Whitfield et al., the Abstract, claim 1, col. 3, ln 14-22, Example 1 and claim 9.

² Whitfield et al., the Abstract, claim 9, col. 3, ln 14-22, Examples II-IV and VI.

Agyapong et al. is directed to catamenial tampons having improved expansion characteristics, and thus, improved leakage protection.

Shah et al. discloses a process for increasing the absorbency of cellulosic fibers by a high temperature wet treatment comprising heating the fibers in a water bath at temperatures within the range of about 95°C to 100°C for periods ranging from about one to sixty minutes. Shah et al. is further directed to a method for increasing the absorbency of cellulosic fibers by treating said fibers with a finishing agent such as polyoxylethylene sorbitan monoesters of a higher fatty acid. (See Shah et al. at col. 3, lines 33-55).

In order for the Office to show a *prima facie* case of obviousness, M.P.E.P. § 2142 requires a clear articulation of the reasons why the claimed invention would have been obvious. Specifically, to reject a claim based on this rationale, the Office must articulate the following: (1) a finding that there was some teaching, suggestion, or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine reference teachings to arrive at each and every limitation of the claimed invention; (2) a finding that there was reasonable expectation of success; and (3) whatever additional findings based on the *Graham* factual inquiries may be necessary, in view of the facts of the case under consideration, to explain a conclusion of obviousness. The Office has failed to meet its burden under number (1) above, as there is no apparent reason for one skilled in the art to modify and/or combine the references to arrive at each and every limitation. It simply would not have been obvious to one skilled in the art to arrive at Applicants' claimed combinations.

Significantly, as recognized by the Office, Scott, Jr. et al. fails to teach or suggest applying a finish selected from the group consisting of imidazolium ethosulfates, methosulfates, and the ethoxylated and propoxylated derivatives of imidazolium ethosulfates and methosulfates to the short fibers. This is a significant aspect of Applicants' amended claims 20 and 36.

The Office relies on Whitfield, et al. to teach applying a imidazolinium methosulfate to its pulp fibers, and suggests that one skilled in the art would apply the finish of Whitfield, et al. to the fibers of Scott, Jr. et al. in order to enhance their absorbency. Applicants respectfully disagree as there is simply no reason for one skilled in the art, reading Scott, Jr. et al., to even look at the Whitfield et al. reference for possible combination.

Particularly, Scott, Jr. et al. focuses on its nonwoven, absorbent fibrous web to include a layer of airlaid fibers. By contrast, Whitfield et al. is directed to felted cellulosic fibers into a sheet; that is, the manufacturing methods used in Whitfield et al. are completely separate and distinct from that used to make the layer of airlaid fibers in Scott, Jr. et al. Moreover, the finish of Whitfield et al. is applied to the slurry of fibers prior to felting them into a sheet. There is nothing to suggest that the finish or method of applying the finish in Whitfield et al. (i.e., in a slurry) could sustain the airlaid processing conditions of the Scott, Jr. et al. reference. Particularly, as known in the art, airlaid processes do not use slurries at all; the fibers are formed into the structure of a web using air. Accordingly, one skilled in the art would not, and could not, have a reason to combine the Scott, Jr. et al. and Whitfield et al. references to arrive at each and every limitation of Applicants' claims 20 and 36.

As there is no reason or motivation to modify/combine the cited references to arrive at a short fiber including a finish selected from the group consisting of imidazolium ethosulfates, methosulfates, and the ethoxylated and propoxylated derivatives of imidazolium ethosulfates and methosulfates as required in claims 20 and 36, claims 20 and 36 are patentable over the combination of cited references.

Further, claims 21-26, 29-33, 35-39, and 41-45 depend from claims 20 and 36, respectively, and thus, are patentable over the cited references for the reasons set forth above for claims 20 and 36, as well as for the additional limitations they require.

New claim 46 is directed to a short fiber provided with a finish in an amount of more than 0.035 percent by weight, based on the fiber weight. The finish is selected from the group consisting of imidazolium ethosulfates and the ethoxylated and propoxylated derivatives of imidazolium ethosulfates. The short fiber has a multi-limbed cross-section and a moisture content in the range of from 4 to 16%.

At best, Whitfield et al. teaches 1-stearamidoethyl-1-methyl-2-heptadecyl imidazolinium methosulfate as a finish for use in its felting process to form a web of cellulosic fibers. There is no teaching or suggestion, however, of the use of a finish selected from the group consisting of imidazolium ethosulfates and the ethoxylated and propoxylated derivatives of imidazolium ethosulfates as required in new claim 46. Moreover, the remaining cited references fail to overcome this shortcoming as they do not mention an imidazolium derivative-containing finish at all. Accordingly, new claim 46 is patentable over the cited references.

CONCLUSION

In view of the foregoing amendments and remarks, all the claims now pending in this application are believed to be in condition for allowance. Reconsideration and favorable action with respect to all the pending claims is respectfully solicited.

The Commissioner is hereby authorized to charge any fees that may be required in connection with this Amendment E and Response to Final Office Action After RCE to Deposit Account No. 01-2384.

Respectfully Submitted,

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